

3. If the resistance is as specified, the stator coil is good. If the resistance is higher than specified, the coil is damaged. Replace the stator assembly.
4. Use an ohmmeter set at  $R \times 1$  and check continuity from each yellow wire terminal in the alternator stator end of the connector and to ground. Replace the stator coil if any yellow terminal has continuity to ground. Continuity indicates a short within the stator coil winding.

#### NOTE

*Before replacing the stator assembly, check the electrical wires to and within the electrical connector for any open or poor connections.*

5. If the stator coil (A, **Figure 8**) fails either of these tests, replace it as described in *Alternator Cover* in Chapter Five.
6. Apply a dielectric grease to the stator coil connector before reconnecting it. This will help seal out moisture. Make sure the O-ring is mounted on the stator coil connector.
7. Reconnect the alternator/pulse generator connector.

## IGNITION SYSTEM

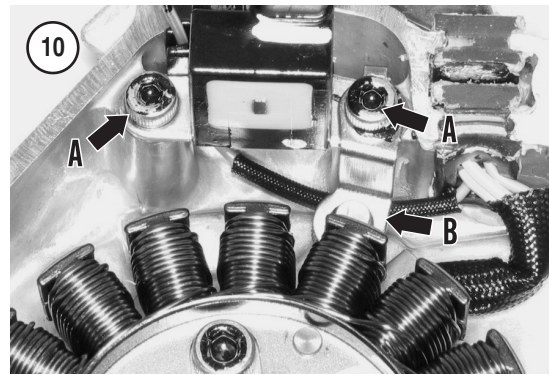
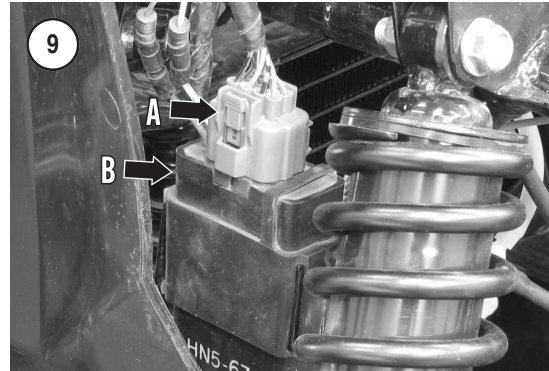
All models are equipped with a capacitor discharge ignition system.

### Servicing Precautions

1. Never disconnect any of the electrical connections while the engine is running.
2. Apply dielectric grease to all electrical connectors before reconnecting them. This will help seal out moisture.
3. The electrical connectors must be free of corrosion and properly connected.
4. The ignition control module (ICM) unit is mounted in a rubber mount. If it was removed, be sure to reinstall it into its rubber mount.

### Troubleshooting

Refer to Chapter Two.



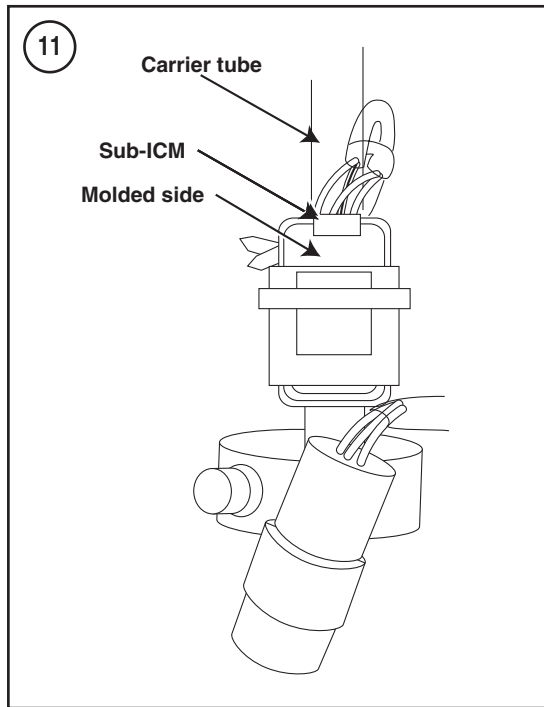
### Pulse Generator

The pulse generator is mounted inside the alternator cover (B, **Figure 8**). The pulse generator may be tested with the alternator cover mounted on the engine.

### Peak voltage test

The following test checks the condition of the pulse generator, wiring and connections.

1. Detach the ICM connector (A, **Figure 9**) from the ICM (B).
2. Connect the positive voltmeter lead to the blue/yellow wire terminal in the connector.
3. Connect the negative voltmeter lead to the green/white wire terminal in the connector.
4. Turn the ignition switch on.
5. Push the starter button and operate the starter while observing the voltmeter.
6. The minimum voltage reading should be at least 0.7 volts.

**NOTE**

Early FE and TE models are equipped with a sub-ICM. If the tests indicate a fault, check the sub-ICM before replacing a suspected component. Refer to **Sub-ICM** in this chapter.

**NOTE**

Slow cranking speed may produce a low voltage reading. If the voltmeter indicates at least one reading that is at least 0.7 volts, then the voltmeter reading is considered acceptable.

7. If the voltage reading is less than 0.7 volts, proceed as follows:

- Disconnect the alternator connector (B, **Figure 2**).
- Connect the positive voltmeter lead to the blue/yellow wire terminal in the alternator end of the connector.
- Ground the negative voltmeter lead to the engine.
- Turn the ignition switch on.
- Push the starter button and operate the starter while observing the voltmeter.
- The minimum voltage reading should be at least 0.7 volts.

8. If the voltage reading is abnormal in Step 6, but satisfactory in Step 7, check for faulty wiring or connections.

9. If the voltage reading is abnormal in Step 6 and Step 7, the pulse generator is faulty.

**Removal/installation**

- Remove the alternator cover as described in Chapter Five.
- Remove the pulse generator mounting bolts (A, **Figure 10**) and wire clamp (B).
- Disconnect the wire lead from the pulse generator and remove the pulse generator.
- Reverse the removal steps to install the pulse generator. Apply threadlocker to the mounting bolts and tighten them to 6 N•m (53 in.-lb.).

**Ignition Control Module**

No test specifications are available for the ignition control module (ICM). The ICM should be replaced only after all other components, including wiring and connections, have been eliminated through troubleshooting as the possible cause of the malfunction. Refer to Chapter Two.

**Removal/installation**

The ICM (B, **Figure 9**) is mounted on the front of the ATV.

- Remove the front fender (Chapter Fifteen).
- Disconnect the electrical connector (A, **Figure 9**) from the ICM.
- Remove the ICM from its rubber mount.
- Install the ICM by reversing the removal steps.

**Sub-ICM (Early FE/TE Models)**

Early FE and TE models are equipped with a sub-ICM. Refer to the wiring diagrams at the back of this manual. The sub-ICM is attached to the front carrier rack under the front fender (**Figure 11**).

**Removal/installation**

- Detach the connector from the sub-ICM.
- Detach the retaining straps and remove the sub-ICM.

3. When installing the sub-ICM, position the molded side as shown in **Figure 11**. Route the wiring so it is secured by the upper retaining strap.

### Ignition Coil

The ignition coil is mounted on the left upper frame rail (**Figure 12**). The ignition coil may be tested without removing it.

#### Primary peak voltage test

1. Remove the spark plug cap (**Figure 13**).
2. Connect a new spark plug to the plug cap.
3. Ground the spark plug to the crankcase.

#### WARNING

*High voltage is present during ignition system operation. Do not touch ignition components, wires or test leads while cranking or running the engine.*

#### NOTE

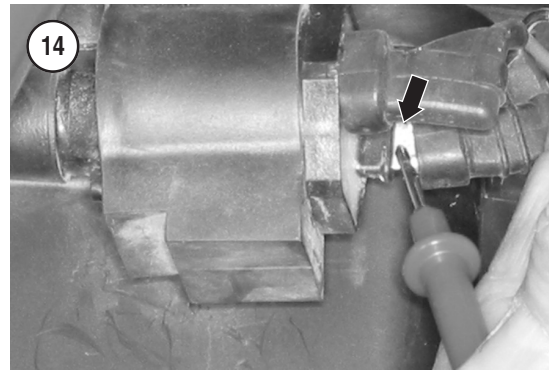
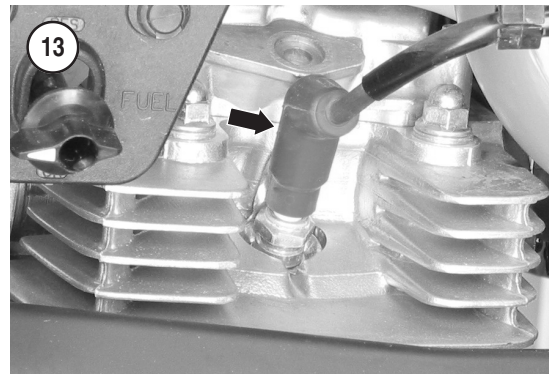
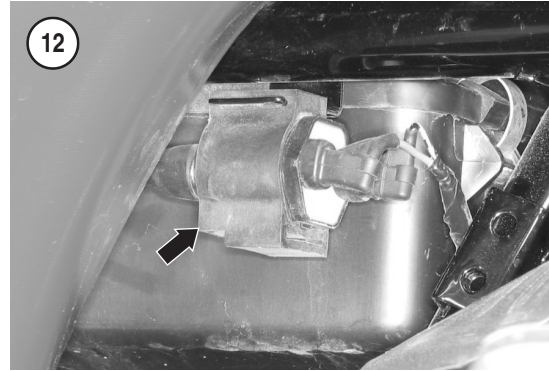
*All peak voltage specifications are minimum values. If the measured voltage meets or exceeds the specification, the test results are satisfactory.*

4. Check the peak voltage by performing the following:

#### NOTE

*Do not disconnect the wires from the ignition coil for the following test. If it is not possible to contact the coil terminal with the tester probe, pierce the wire using a needle probe.*

- a. Connect the positive test probe to the black/yellow wire or terminal on the ignition coil (**Figure 14**) and connect the negative test probe to ground.
  - b. Turn the ignition switch on.
  - c. Press the starter button and crank the engine for a few seconds while reading the meter. Record the highest meter reading. The minimum peak voltage is 100 volts.
5. If the peak voltage reading is less than specified, perform the troubleshooting procedure described in Chapter Two to determine the cause for low voltage reading.

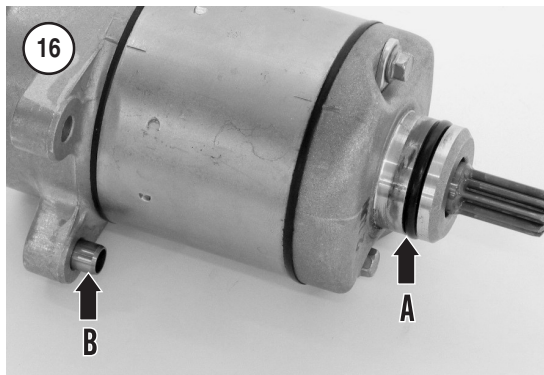
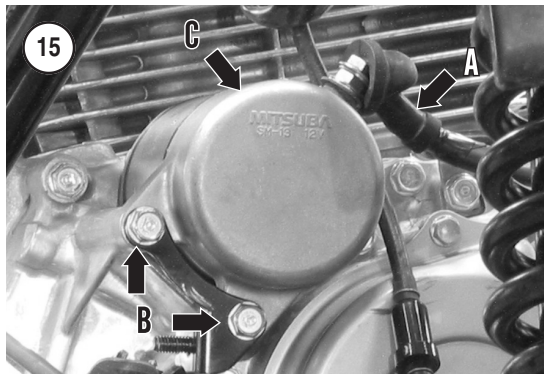


#### NOTE

*Before replacing an ignition coil, have it checked by a dealership on an ignition coil testing machine.*

#### Removal/installation

1. Remove the left side cover (Chapter Fifteen).
2. Disconnect the spark plug cap (**Figure 13**) from the spark plug and disengage the spark plug wire from the retaining clips.



3. Disconnect the two primary wires from the ignition coil (**Figure 12**).
4. Remove the ignition coil and rubber holder from the frame.
5. Remove the rubber holder from the old ignition coil and install it onto the new coil.
6. Install the ignition coil by reversing the preceding removal steps. Make sure all electrical connections are tight and free of corrosion.

## STARTER

The starting system consists of the starter, starter gears, solenoid and the starter button.

**Table 3** lists starter service specifications.

The starter gears are covered in Chapter Five.

### CAUTION

*Do not operate the starter for more than 5 seconds at a time. Let it cool approximately 10 seconds before operating it again.*

## Troubleshooting

Refer to Chapter Two.

## Removal/Installation

1. Park the ATV on level ground and set the parking brake.
2. Remove the air box (Chapter Eight).
3. Disconnect the negative battery cable from the battery.
4. Push back the rubber cap, then remove the nut and the starter cable (A, **Figure 15**) from the starter.
5. Remove the two starter mounting bolts (B, **Figure 15**) and the starter (C).
6. If necessary, service the starter as described in this chapter.
7. Install the starter by reversing the preceding removal steps, plus the following:
  - a. Lubricate the starter O-ring (A, **Figure 16**) with grease.
  - b. Clean any rust or corrosion from the starter cable eyelet.
  - c. Be sure to install the hollow dowel pin (B, **Figure 16**) into the starter mounting leg.
  - d. Tighten the starter mounting bolts securely.

## Disassembly

Refer to **Figure 17**.

1. Find the alignment marks across the armature case and both end covers (**Figure 18**). If necessary, scribe new marks.
2. Remove the two case bolts (A, **Figure 19**), washers (B) and O-rings (C).

### NOTE

*Record the thickness and alignment of each shim and washer removed during disassembly.*

### NOTE

*The number of shims used in each starter varies. The starter may use a different number of shims than shown in the following photographs.*

3. Remove the front cover (D, **Figure 19**) and lockwasher (**Figure 20**).
4. Remove the front shims (**Figure 21**) from the armature shaft.

Copyright of Honda TRX350 RANCHER, 2000-2006 is the property of Penton Media, Inc. ("Clymer") and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.